

NO BREAK ELECTRIC POWER TRANSFER SYSTEM

ABSTRACT OF THE DISCLOSURE

A no break power transfer system that is particularly useful onboard an aircraft ensures that there is an appropriate frequency match between the outputs of different power supplies. A frequency adjuster between an auxiliary power unit and a load alters the frequency of power available from the auxiliary power unit before that power is supplied to the load. In one example, a controller determines when the frequency of output power from the main power supply does not match that from the auxiliary power unit. The controller controls the frequency adjuster to make an appropriate frequency change until there is a sufficient match. In one example, the frequency adjuster includes a rectifier that converts an alternating current output of the auxiliary power unit to a direct current output that is then converted by an inverter to provide an alternating current output having the appropriate frequency.